

Amendments to the Specification

Please amend Paragraph [0019] as follows:

[0019] Referring to FIGS.1, 2 and 3, the present invention is related to the layout on a printed circuit board 1 used to reduce noise. The printed circuit board 1 has a plane substrate 10 including at least three insulated layers to be disposed with conductive material, the outer ones formed as an upper face 11 and lower face 13, and intermediate layers 12. An insulative layer 14 is sandwiched between every two of the insulated layers. Besides, a row of footprints 2 used to connect to other electrical devices, especially referred to quadrate conductive pads, is disposed on the upper face 11 of the printed circuit board 1. According to the signal transmission frequency and speed standard, these connectable footprints 2 are arranged as several differential pairs. In this embodiment, the two footprints T1, R1, T4, R4 at both ends of this row and the middle two footprints T3, R3 of this row are paired. And the remained footprints T2, R2, the third and sixth ones in the row, are paired. Each connectable footprint is integrally connected to a metalized hole ~~14~~ 4 ~~extending, which extends~~ through the insulative layer 14, ~~adjacent to the upper face 11~~ from the upper face 11 to one of intermediate layers 12, by a conductive trace 3 formed on the upper face 11. Meanwhile, the extending end of every metalized hole ~~14~~ 4 is integrally connected to a medial trace 5 formed on one of the intermediate layers 12 to further connect to other portions of the printed circuit board 1 or electronic components mounted on the printed circuit board 1. Besides, footprints 2 of the same pair connect to one of medial traces 5 formed on different intermediate layers 12 respectively. For example, the footprint T1 (T2, T3, T4) of one pair connects to the medial trace C1 (C2, C3, C4) ~~formformed~~ on one intermediate layer 12 while the other footprint R1 (R2, R3, R4) of the same pair connects to the medial trace C1' (C2', C3', C4') of another

intermediate layer 12. And portions of these paired two medial traces C1, C1' (C2, C2', C3, C3' and C4, C4') are aligned with each other over a predetermined length in the normal direction of intermediate layers. In the arrangement, the signal transmission paths for every differential pair T1, R1 (T2, R2, T3, R3, T4, R4) can be moved closer to each other and farther away from the transmission paths of any other pair. Thus the signal transmission for each differential pair is stabilized and less pair to pair noise will rise.

[0020] Referring to FIGS. 1 and 3, the medial traces 5 connect to a chosen pair (T3, R3 for example) are used to compensate the pair to pair noise which arises in electrical devices like cables or electrical connectors due to their parallel arranged conductors. ~~The traces C3, C3' connected to the chosen pair T3, R3 and extending from the end of their corresponding metalized holes 4 on the intermediate layers 12 are detoured to pass through a corresponding area next to footprints 2 of the adjacent pair T2, R2 mounted on the upper face 11 and are formed a corresponding footprint R3', T3' over there.~~ The trace connected to the conductive footprint T3 extends from the corresponding metalized hole 4 and then extends down two layers, back under itself, via the dotted lines T3', under the footprint R2, and continuing on to C3'. The trace connected to the footprint R3 extends from the end of a corresponding metallized hole 4 and then extends down one layer, back under itself, via the dotted lines T3', under pad T2, and continuing on to C3. C3 and C3' are then a coupled differential pair running down the length of the PCB. The corresponding footprint R3', T3' connected to the chosen pair R3, T3 is parallel to the footprint of the adjacent pair T2, R2 and signals passing through the footprints T2, R2 can be compensated due to coupling with the footprints T3, R3', R3, T3' of the chosen pair at the same time. It is understandable that only the neighborhood area of the footprints 2 is occupied by

compensating circuits. And the predetermined length of every footprint 2 needed to connect to the corresponding conductors of the electrical devices is long enough for better compensating performance. Therefore space-saving and miniaturization of a built-in printed circuit board can be easily achieved.